# Features of Government Lending to Agricultural Entities and Their Influence on Supply Chain Management Strategies

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***Abstract*- The article is devoted to the study of the influence of government lending to agricultural entities on the choice of the correct strategy of supply chain management in the production of products. We have defined the concept and features of government lending to agricultural entities. The current state of government lending to agricultural entities has been described. The main strategies of supply chain management have been analyzed. The economic indicators of the influence of government lending to agricultural entities and its influence on the choice of supply chain management strategy have been determined. As a result, the efficiency of public lending to agricultural entities has been made and proposals for improving the efficiency of supply chain management have been suggested.**

***Key words*-*lending, public lending, agricultural entity, economic efficiency, supply chain management.***

## 1. Introduction

Agriculture is one of the strategically important economic activity sectors. A significant percentage of commodity production in Ukraine belongs to agricultural products. This is due to the favorable climatic conditions, structure and soil fertility, as well as other social, socio-cultural and economic factors [1]. The profitability of agricultural production remains at a rather low level, despite the strategic importance of the industry for the state. This implies the necessity of developing a number of measures on state support for agricultural entities through various assistance forms, including preferential loans and the definition of a management strategy [2]. The role of supply chain management components is crucial for the effective functioning of agricultural production. These components are key factors to achieve competitive advantage and increase productivity [3]. However, an empirical study linking supply chain initiatives with firm performance remains scarce. In addition, the essential features that lead to such an achievement have not been fully explored. Therefore, this study attempts to introduce a conceptual framework to illustrate causal links between SCM components and firm performance [4]. The current trend towards globalization has not only provided companies with various opportunities, but also with a number of challenges. On a global basis, companies have established warehouse facilities, production plants and distribution centers across countries for various reasons, such as cost advantages, access to raw material sources or specialist skills and capabilities [5]. Farming companies have been managing supply chain complexity through tightly integrated supply chains [6]. Supply chain integration (SCI) can be defined as the extent to which a company strategically interconnects and aligns its supply chain with its partners, upstream and downstream [7].Some issues of public lending, including lending to agricultural commodity producers, were studied by different scholars. Most scientific works are devoted to certain types and forms of public lending, but the problems related to the economic efficiency of public lending to agricultural entities are poorly researched in domestic economic and legal science [8]. At the same time, the efficiency of public lending to agricultural entities in Ukraine remains at a rather low level, which requires the development and implementation of a number of measures to improve public lending mechanism. Therefore, the purpose of the research is to determine the economic efficiency of public lending to agricultural entities and its impact on the choice of supply chain management strategy in agricultural products.

## 2. Methodology

The analysis of the Ukraine's State Budget revenue from lending and guarantee operations from 2017 to 2018 was conducted. Among the factors influencing supply chain management, it was proposed to consider the following: agricultural production index, price index, cost index, economic efficiency of public lending to agricultural entities.



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## 3. Results

When determining the economic efficiency of public lending to agricultural entities, it must be assumed that the economic essence of lending is that the own or borrowed funds of a bank or other financial institution are provided in the form of loan funds to a private or legal person in order to replenish floating or fixed assets, satisfy consumer or other needs, on conditions of their return, timely use and payment. The Law of Ukraine "On Banks and Banking" defines bank loan as any obligation of the bank to provide a certain amount of money, any guarantee, any obligation to acquire the right to claim debt, any debt rescheduling, which is provided in exchange for the debtor's obligation to repay the amount of money owed, as well as the obligation to pay interest and other fees from such an amount [9].Consequently, the lender receives an economic effect in the form of income; the borrower receives a social effect in the form of meeting current or prospective needs. Regarding the above-mentioned information, public lending to agricultural entities has a number of features that need to be clarified in order to define the further criteria for the supply chain management efficiency. Thus, the features of lending to economic entities in domestic legislation are defined in art. 345-349 of the Ukrainian Civil Code. In particular, according to art. 345 of the Ukrainian Civil Code, lending operations lie in the allocation of funds raised from legal entities (borrowers) and citizens on the behalf of banks, as well as on their own terms and at their own risk. Lending operations are banking operations defined as such by the law on banks and banking. Credit relations are carried out on the basis of the loan agreement concluded between the lender and the borrower in a written form [10]. Public investment lending to economic entities defines economic relations arising in the process of redistribution of funds between economic entities (enterprises, associations, organizations) and the state as a result of budget and extra-budgetary loans (the company acts as a borrower) [11].Thus, the specific nature of public lending in comparison with banking and commercial lending is that:

1) the state acts as a borrower; therefore, in the legal relationship of lending there is no equality of parties, inherent to other types of civil and legal relations, including the credit ones; 2) sources of funds from which loans are made are budget and / or special extra-budgetary funds, which are formed by the state; 3) granting loans on a competitive basis with the passing of a special selection procedure; 4) granting loans for the purposes indicated in the acts of state authorities; 5) special forms of lending, which in some cases provide for the indirect allocation of budgetary or extra budgetary funds, for example, partial or full compensation of a bank loan or its interest. Now economic relations of public lending to agricultural entities are regulated by the Law of Ukraine "On State Support of Agriculture of Ukraine" (2004).At the same time, a loan subsidy can be provided both for short-term, medium-term and long-term loans. In the first case, the subsidy is provided for the loans taken to cover production costs and to purchase agricultural products from agricultural producers. The loan subsidy is provided for medium-term loans taken to purchase fixed assets of agricultural production; to cover costs of construction and reconstruction of industrial facilities for agricultural purposes, as well as to process agricultural products. Based on this, you can plan the distribution of priorities while planning the main provisions of supply chain management. The loan subsidy is given for long-term loans taken for purchasing of fixed assets of agricultural production, equipment for the production and processing of agricultural products, as well as for construction and reconstruction of production facilities (including wholesale markets for agricultural products, storage facilities for grain, vegetables and fruits).In implementation of the provisions of the Law of Ukraine "On State Support of Agriculture of Ukraine" by its Resolution of March 1, 2017 No. 130, the Cabinet of Ministers of Ukraine approved the procedure for using budget funds provided to partially compensate the cost of domestic agricultural equipment. Therefore, public lending to agricultural entities in Ukraine today is characterized by the limited form, since only a mechanism has been developed for providing credit subsidies for the purchase of agricultural equipment. This has a negative impact on the implementation of supply chain management between enterprises, since in the end there may be an uncertain result. And this affects production and its chain supply [12].According to the official data of the Ministry of Agrarian Policy and Food of Ukraine for the first half of 2018, 159,237.7 UAH of compensation (credit subsidies) was provided for the reimbursement of agricultural equipment, which is 25% higher than for the same period last year [13].

Another form of public lending to agricultural entities is the provision of state guarantees for bank loans. Thus, a significant number of state guarantees was provided in 2009 (32110 million UAH), in 2012 (75349 million UAH) and in 2013 (21887 million UAH). For the first half of 2018, the volume of state guarantees under the project on long-term lending amounted to 3.913 million UAH, which is almost a quarter less than for the same period in 2017 [14]. In turn, the profitability of the state budget on provided loans is insignificant. In particular, in 2018, the profitability from lending and guarantees was expected to be 2030829 thousand UAH, which amounted to approximately 0.2% of the total revenue of the state budget [15], while in 2017 this amount was 1884200 thousand UAH (0.2%) [16]. That is, there was an actual growth of income by 8% with the expected inflation rate of 9%.At the same time, the debt, including the past due debt of farmers, is growing every year, as evidenced by the data given in Table 1 [15, 16].

**Table1.** Budget funds return, thousand UAH

| Source of revenue | 2017 | 2018 | Difference | |
|---|---|---|---|---|
| | | | Amount | % |
| Return of funds given to purchase material and technical recourses for agricultural needs | 824400 | 946200 | 121800 | 156 |
| Return of funds for farm loans | 40000 | 43100 | 3100 | 107 |

As it can be seen from the above mentioned data, the debt of farmers in the first half of 2018 compared to the same period of 2017 increased by more than 50%, and that of farms - by 7%.Consequently, without paying attention to the fact that the majority of economic entities in relation to which public lending is carried out in various forms [14], are engaged in agricultural activities, the scientific literature suggests that the practical application of the mechanism of cheaper agricultural loans in Ukraine has a number of drawbacks. An additional argument to support this statement is the main indicators of the agricultural sector development in Ukraine. Thus, in the first half of 2018, the agricultural production index grew by only 11% compared to the same period in 2017; the price index decreased by almost 2%, while the cost index increased by 13% [17]. This demonstrates unprofitability of the domestic agriculture sector. A reduction in the management department and a product supply decrease influenced the supply chain management strategy. Therefore, the above mentioned indicators and their influence on supply chain management demonstrate the insufficient effectiveness of the state policy on the agro-industrial complex development. Public lending is a part of this policy. Among the main reasons for this, scientists point out the complexity of the credit subsidy mechanism and its disconnection between many borrowers and the loan directions; insufficient flexibility of the mechanism, which significantly restricts the number of users of preferential loans; imperfection of the object of partial compensation and the procedure for its calculating; lack of transparency, which leads to abuse in the distribution of preferential loans; incomplete compensation of commercial banks losses associated with the use of preferential interest rates, reduces the efficiency of such operations; loan repayment delays, etc. [18,8].It is necessary to agree with the scientists that there are many problems and shortcomings in the mechanism of public lending to agricultural entities [19]. This is indicated by the fact that in the total volume of overdue payables to the state the share of agricultural producers exceeds 50% [20]. The solution of these problems must be comprehensive. This involves not only the improvement of the legislative framework for public lending, but also the introduction of organizational mechanisms for monitoring the financial situation of economic entities and the targeted use of public credit funds, establishing supply chain management, etc.

## 4. Discussion

The efficiency improvement of the public lending system requires parallel implementation of a number of accompanying measures. It means that an integrated approach must be applied. The key

point is to secure guarantees for the provision of loans to agricultural entities for targeted programs financed the state. That is, the participants of specific targeted state programs should have priority among other borrowers in obtaining credit resources to carry out their obligations. This will increase the effectiveness of the participants, as well as facilitate the process of monitoring the use and repayment of loans [21]. In this regard, it is proposed to establish a special Loan Guarantee Fund similar to the practice adopted in some European countries. In many foreign countries particular attention is paid to the development of supply chain management in agricultural production [22].For example, in the USA, agricultural producers organize themselves into cooperatives in order to satisfy their own interests at all levels, and this contributes to supply chain management. Thus, in the United States since the end of the XIX century, the agrarian movement has had sufficient political power for conducting negotiations with the federal government. Agricultural producers also developed supply chain management and their own economic organizations for mutual assistance and economic advantages [23]. However, trust and relationship development between supply chain partners is hampered by dependence asymmetry within relationships [24].Furthermore, as firms pursue increasingly lean inventory practices, the associated increased reliance on timely delivery from suppliers reduces the buyer firm's ability to leverage any power advantage they might have due to the supplier's financial dependence. A lean inventory strategy on the part of the buying firm will also amplify the negative effect of any financial dependence on its suppliers. This is not to say that managers should avoid a lean inventory strategy; instead our findings point to the conclusion that managers should be aware of the impact of power asymmetry within the supply chain and understand which situations are best suited for lean inventory implementation [25]Some countries apply support mechanisms that stimulate the development of supply chain management under ineffective lending and limited import [26].Such mechanisms have been created in the EU, the USA, Japan and other countries, where conditions for the cultivation of many crops are worse. The mechanisms, developed in these countries, protect from cheap import of certain types of agricultural products and simultaneously regulate the flow of products that are not produced in sufficient quantities to meet the demand of the population of the country [27].Common features and trends in the development of the agricultural lending system in developed countries are: participation of the state in maintaining the functioning of the system; high level of attraction of credit resources to agriculture; the most common tool is preferential lending; the formation of a "mixed" lending system[18].

## 5. Conclusion

Thus, based on the analysis carried out in the research, we can conclude that the current state of the system of public lending to agricultural entities is characterized by an insufficient efficiency level, which negatively affects both the economic development of the industry itself and supply chain management [28, 29]. Ineffective allocation of public funds leads to the fact that the agricultural sector does not change and the state loses significant budget resources. It has been shown that lending affects such factors as the index of agricultural production, price index, cost index, which in turn indicate the main trends of supply chain management. As a result of the research, it was shown that now these factors have a negative impact, as evidenced by the price index and the cost index increased by 13% in comparison with 2017 [30, 31]. In connection with this and in order to increase the efficiency of the public lending system, it is necessary: 1) to expand the forms of public lending to agricultural entities, providing mixed forms, credit subsidies for short-term goals, etc.; develop a mechanism for providing public loans in various forms; 2) develop a methodology for assessing economic risk from public lending to economic entities; 3) to introduce organizational mechanisms for monitoring the financial situation of agricultural entities, control over the use of public loans, etc.; 4) to continue deregulation, i.e. to stimulate the development of a free agricultural market; 5) to introduce state mechanisms for controlling cheap import, etc.

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